



High Performance
for a Wide Range of
Applications

VIC Series Actuators for Butterfly Valves



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BELIMO[®]

Butterfly Valve Nomenclature

F6	50	VIC	+AMB	24	-3-X1		
Valve F6 = 2-way F7 = 3-way	Valve Size 50 = 2" 65 = 2½" 80 = 3" 100 = 4" 125 = 5" 150 = 6" 200 = 8" 250 = 10" 300 = 12"	Trim Material VIC = Ductile Iron Grooved End Body, Nickel Coated Ductile Iron Disc, 0% Leakage up to 200 psid	Actuator Type Non Fail-Safe AMB, AMX GMB, GMX GRB, GRX PRB, PRX SY Fail-Safe Electronic GKB, GKX PKRX Spring Return AFB, AFX AFRB, AFRX	Power Supply -24 = AC/DC 24 V -110 = AC 110/120 V -120 = AC 120 V -220 = AC 230 V UP = AC 24...240 V or DC 24...125 V	Control -3-X1 = On/Off, Floating Point -SR = Modulating Input = 2...10 V -MFT or -MFT-X1 = Multi-Function Technology	-S = Built-in Auxiliary Switch N4 = NEMA 4X -T = Terminal Block	-200 = 8" -250 = 10"

Ordering Example

1 Choose the valve actuator combination.

2 Specify preference or configuration.

3 For MFT orders only - select programming code (consult factory)

4 Does order require tagging?

5 Complete Ordering Example: F650VIC+AMB24-3-X1

F650VIC+AMB24-3-X1

NO Tagging (if needed)

2-way Configuration

Non Fail-Safe	Modulating	2 Pos.	No Set Up Required Field Logic Determines Normal Position
		NC	(Normally Closed) 0.5 V/2 V/4 mA = Closed
Fail-Safe	Modulating	2 Pos.	NO/FO (Normally Open/Fail Open) Field Logic Determines Normal Position Valve Fails OPEN
		NC/FC	(Normally Closed/Fail Closed) Field Logic Determines Normal Position Valve Fails CLOSED
	NO/FC	(Normally Open/Fail Closed) 0.5 V/2 V/4 mA = Open Valve Fails CLOSED	
		(Normally Closed/Fail Open) 0.5 V/2 V/4 mA = Maser Valve Open Master (Actuated) Valve Fails OPEN	
NC/FC	(Normally Open/Fail Open) 0.5 V/2 V/4 mA = Master Valve Open Master (Actuated) Valve Fails OPEN		
	(Normally Closed/Fail Closed) 0.5 V/2 V/4 mA = Master Valve Closed Master (Actuated) Valve Fails CLOSED		

3-way Configuration

Non Fail-Safe	Modulating	2 Pos.	No Set Up Required Field Logic Determines Normal Position
		NC	Specify Flow Pattern Master (Actuated) Valve (Normally Closed) 0.5 V/2 V/4 mA = Closed
Fail-Safe	Modulating	2 Pos.	NO/FO (Normally Open/Fail Open) Field Logic Determines Normal Position Master (Actuated) Valve Fails OPEN
		NC/FC	(Normally Closed/Fail Closed) Field Logic Determines Normal Position Master (Actuated) Valve Fails CLOSED
	NO/FO	(Normally Open/Fail Open) 0.5 V/2 V/4 mA = Master Valve Open Master (Actuated) Valve Fails OPEN	
		(Normally Open/Fail Closed) 0.5 V/2 V/4 mA = Maser Valve Open Master (Actuated) Valve Fails CLOSED	
NC/FO	(Normally Closed/Fail Open) 0.5 V/2 V/4 mA = Master Valve Closed Master (Actuated) Valve Fails OPEN		
	(Normally Closed/Fail Closed) 0.5 V/2 V/4 mA = Master Valve Closed Master (Actuated) Valve Fails CLOSED		

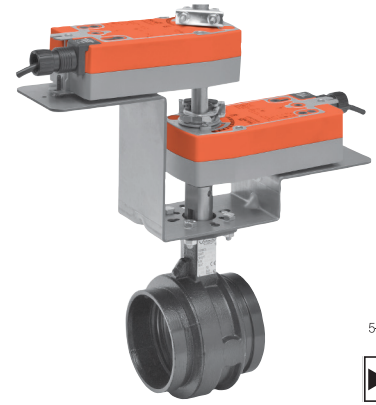
Tagging:
Valves may be tagged per customer specification. (\$12.00 per tag)
Example:
Chiller 1
3rd Floor East

Part number for tagging:
99981-00101

Complete Ordering Example: F650VIC+AMB24-3-X1
Configuration: NO
Programming: X10

Grooved Butterfly Valve Product Range

		2-way			Suitable Actuators			
		Valve Nominal Size		Type	Non Fail-Safe		Fail-Safe	
C _v 90°	C _v 60°	IN	DN [mm]	2-way			Spring Return	Electronic
115	36	2	50	F650VIC	AM Series	GR Series	AF Series	
260	80	2½	65	F665VIC				
440	140	3	80	F680VIC				
820	250	4	100	F6100VIC				GK
1200	370	5	125	F6125VIC				PKR Series
1800	560	6	150	F6150VIC		DR Series		
3400	1050	8	200	F6200VIC			PR Series	
5800	1800	10	250	F6250VIC			SV (2 Year Warranty)	
9000	2790	12	300	F6300VIC				



5-year warranty

Mode of Operation

Grooved butterfly valves are designed for body pressures ranging from full vacuum to 300 psi and for bi-directional, dead end services to full body pressure. The valve patented seat design ensures full 360° sealing. The pressure enhanced seat compresses to form a larger seating area as the pressure increases. Valve construction and performance meet and exceed MSS-SP-67 requirements.

Product Features

The unique single offset disc and seat design ensures positive valve seating while maintaining low seating torque.

Actuator Specifications

Control type	on/off, floating point, modulating, 2...10 V, multi-function technology (MFT)
Manual override	all models
Electrical connection	3 ft. [1 m] cable terminal block (-T models)
Communication (PR)	BACnet MS/TP, (BTL certified), NFC, Modbus

Valve Specifications

Fluid	chilled, hot water, 60% glycol
Flow characteristic	F6 modified equal percentage F7 modified linear
Sizes	2...12"
End fitting	grooved ANSI/AWWA (C606)
Materials*	
Body	ductile iron ASTM A536, grade 65-45-12
Disc	Body finish black alkyd enamel electrolysis nickel coated ductile iron
Shaft	416 stainless steel
Seat	EPDM
Bearings	fiberglass with TFE lining
Fluid temp. range	-22...+250°F [-30...+120°C]
Body pressure rating	300 psi
Close-off pressure	200 psid (for most combinations)
Rangeability	100:1
Maximum velocity	20 FPS
Leakage	0%

*VIC-300™ Masterseal™ is manufactured by the Victaulic Company.

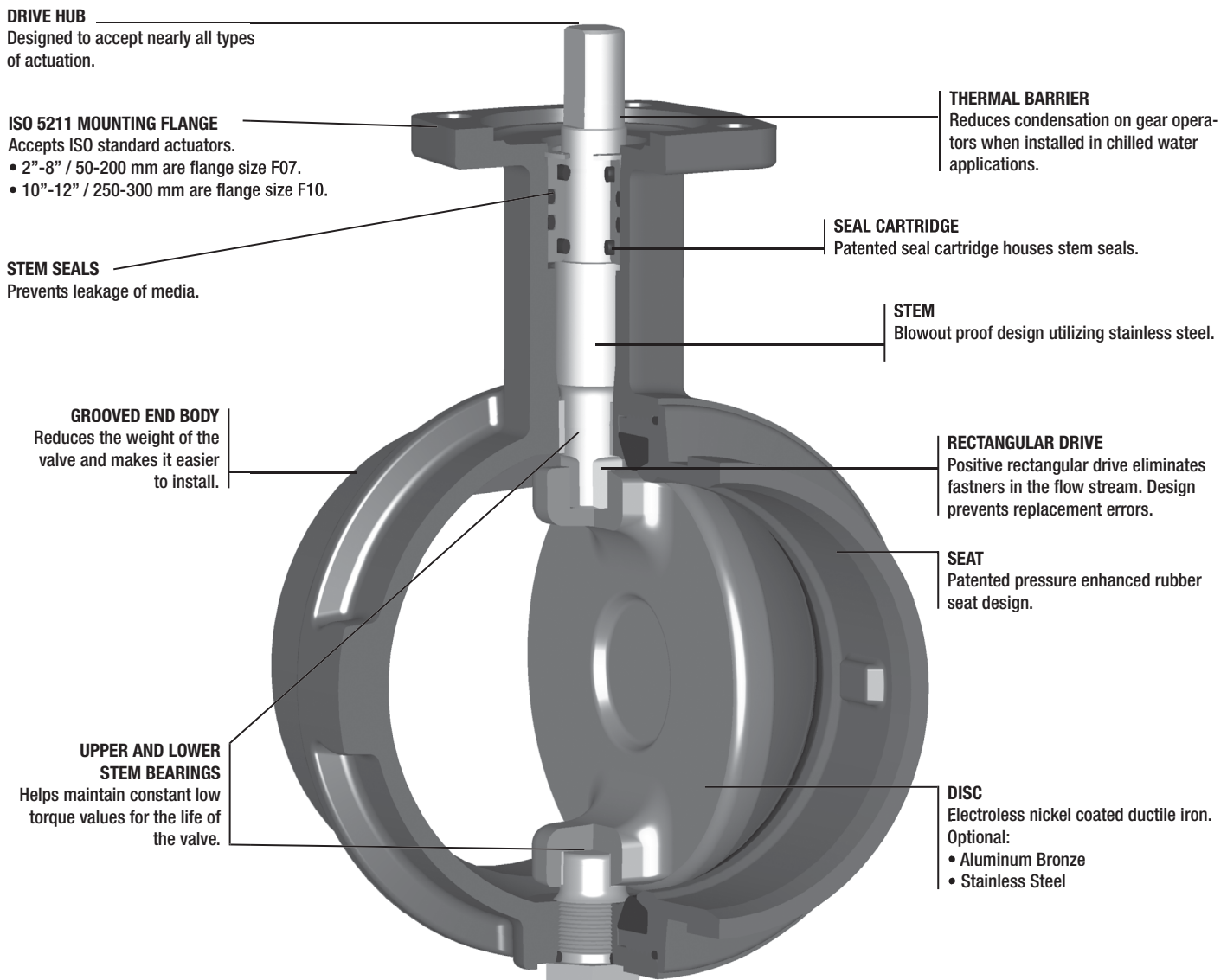
		3-way			Suitable Actuators			
		Valve Nominal Size		Type	Non Fail-Safe		Fail-Safe	
C _v 90°	C _v 60°	IN	DN [mm]	3-way			Spring Return	Electronic
115	36	2	50	F750VIC	GM Series	PR Series	AF	
260	80	2½	65	F765VIC				
440	140	3	80	F780VIC				
820	250	4	100	F7100VIC				GK
1200	370	5	125	F7125VIC				PKR Series
1800	560	6	150	F7150VIC				
3400	1050	8	200	F7200VIC			PR Series	
5800	1800	10	250	F7250VIC			SV (2 Year Warranty)	
9000	2790	12	300	F7300VIC				

Belimo VIC.. Series Victaulic®

Butterfly Valves are designed for pressure ranging from vacuum to 300psi and for dead end services to full working pressure. All Victaulic valves are supplied in grooved style body design.

Valve Design Features

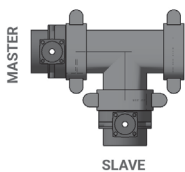
- The valve features a patented seat design that assures full 360° sealing.
- The pressure enhanced seat compresses to form a larger seating area as the pressure increases.
- The seat design also contributes to low breakaway torque of the valve.
- Valves have EPDM seats that are DL classified to ANSI/NSF 61.
- The disc is ductile iron, conforming to ASTM A-536, grade 65-45-12 with electrolysis nickel coating conforming to ASTM B-733.
- Stem is 416 stainless steel conforming to ASTM A-582.



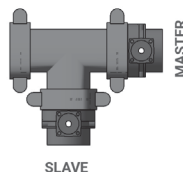
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VIC Series Valves

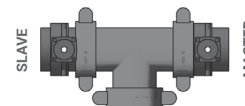
X1x



X2x



X3x



CONFIG CODE	ON/OFF OR MOD@2 VDC MASTER VALVE IS	MASTER VALVE @ FAIL
X10	OPEN	FAIL IN PLACE
X11	OPEN	OPEN
X12	OPEN	CLOSED
X13	CLOSED	FAIL IN PLACE
X14	CLOSED	OPEN
X15	CLOSED	CLOSED

CONFIG CODE	ON/OFF OR MOD@2 VDC MASTER VALVE IS	MASTER VALVE @ FAIL
X20	OPEN	FAIL IN PLACE
X21	OPEN	OPEN
X22	OPEN	CLOSED
X23	CLOSED	FAIL IN PLACE
X24	CLOSED	OPEN
X25	CLOSED	CLOSED

CONFIG CODE	ON/OFF OR MOD@2 VDC MASTER VALVE IS	MASTER VALVE @ FAIL
X30	OPEN	FAIL IN PLACE
X31	OPEN	OPEN
X32	OPEN	CLOSED
X33	CLOSED	FAIL IN PLACE
X34	CLOSED	OPEN
X35	CLOSED	CLOSED

X Specifies Bi-Directional Flow Capability

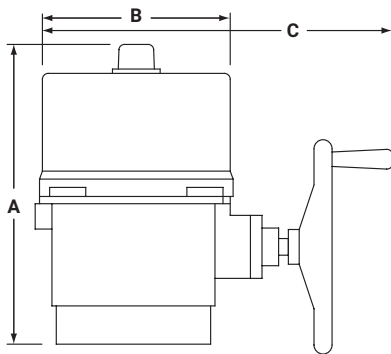
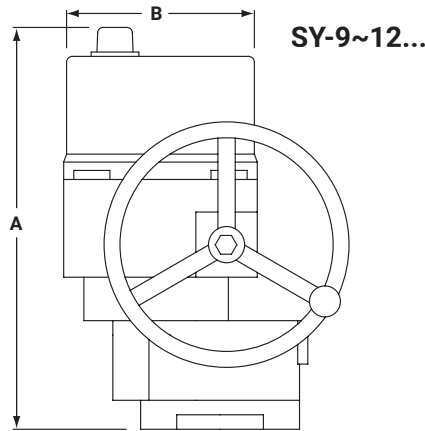
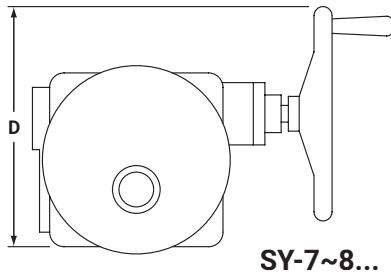
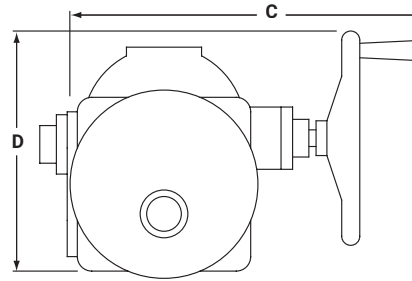
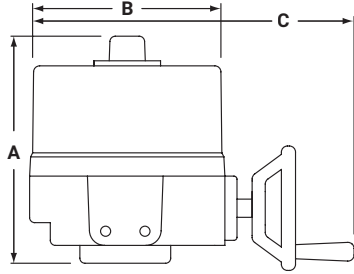
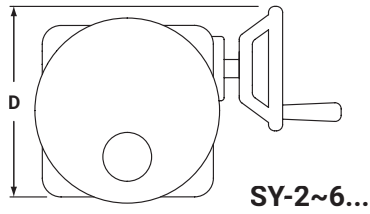
Notes:

1. Slave Valve operates inversely of the Master Valve.
2. The Master Valve is always located on the run.
3. The Slave Valve may also have an actuator if required (Direct Coupled).
4. On/Off actuator normal position is a function of field logic.
5. Modulating actuator normal position (i.e., fully CW or fully CCW) is set by the direction control switch or field programming via NFC app.
6. All 3-way assemblies are designed for 90 degree actuator rotation.
7. Actuators installed default over Master Valve.

VIC Flow in Schedule 40 Pipe (Fluid Velocity in GPM). Use with Grooved Series Butterfly Valves.

SIZE	1 FPS	3 FPS	5 FPS	8 FPS	10 FPS	12 FPS	15 FPS	16 FPS	20 FPS
2"	10	31	52	78	98	118	147	157	196
2½"	15	45	75	122	153	184	230	245	306
3"	23	69	115	176	220	264	330	353	441
4"	40	119	198	313	392	470	590	627	783
5"	62	187	312	490	612	734	920	979	1224
6"	90	270	450	705	881	1058	1321	1410	1763
8"	156	468	780	1253	1567	1880	2350	2507	3133
10"	246	737	1229	1958	2448	2738	3669	3917	4896
12"	353	1058	1763	2820	3525	4230	5288	5640	7050

SY... Series Non-Spring Return Actuator Dimensions



MODEL	DIM A (MAX)	Add to Dim A for cover removal	DIM B	DIM C (MAX)	DIM D
	Inches [mm]	Inches [mm]	Inches [mm]	Inches [mm]	Inches [mm]
SY4~6	12.40 [315]	8.86 [225]	9.21 [234]	14.96 [380]	11.81 [300]
SY7-8	16.54 [420]	8.86 [225]	9.21 [234]	17.72 [450]	13.39 [340]
SY9-12	23.23 [590]	8.86 [225]	10.24 [260]	18.50 [470]	13.78 [350]

Note: ~ indicates range of actuator i.e., SY4~6 = SY-4 and SY-5 and SY-6

24 VAC												
	SY1	SY2	SY3	SY4	SY5	SY6	SY7	SY8	SY9	SY10	SY11	SY12
current	[A]	[A]	[A]	[A]	[A]	[A]	[A]	[A]	[A]	[A]	[A]	[A]
1.6	3.4	3.1	3.1	9.4	8.9	MAX distance between actuator and supply [feet]						
wire gauge												
18	97	45	50									
16	153	72	79	26	28							
14	244	115	126	42	44							
12	387	182	200	66	70							
10	616	290	318	105	111							
8	980	461	506	167	176							

120 VAC												
	SY1	SY2	SY3	SY4	SY5	SY6	SY7	SY8	SY9	SY10	SY11	SY12
current	[A]	[A]	[A]	[A]	[A]	[A]	[A]	[A]	[A]	[A]	[A]	[A]
0.7	1.2	1.2	1.2	2.1	2	2.4	4.2	4.2	3	3.2	3.6	3.8
wire gauge												
18	1,103	644	644	368	386	322	184	184	257	241	215	203
16	1,750	1,021	1,021	583	613	510	292	292	408	383	340	322
14	2,788	1,626	1,626	929	976	813	465	465	651	610	542	514
12	4,428	2,583	2,583	1,476	1,550	1,292	738	738	1,033	969	861	816
10	7,044	4,109	4,109	2,348	2,465	2,054	1,174	1,174	1,644	1,541	1,370	1,298
8	11,204	6,536	6,536	3,735	3,922	3,268	1,867	1,867	2,614	2,451	2,179	2,064

230 VAC												
	SY1	SY2	SY3	SY4	SY5	SY6	SY7	SY8	SY9	SY10	SY11	SY12
current	[A]	[A]	[A]	[A]	[A]	[A]	[A]	[A]	[A]	[A]	[A]	[A]
0.4	0.6	0.6	0.6	1.1	1	1.1	2	2	2.5	2.6	2.7	2.5
wire gauge												
18	3,701	2,467	2,467	1,346	1,480	1,346	740	740	592	569	548	592
16	5,871	3,914	3,914	2,135	2,348	2,135	1,174	1,174	939	903	870	939
14	9,352	6,234	6,234	3,401	3,741	3,401	1,870	1,870	1,496	1,439	1,385	1,496
12	14,854	9,903	9,903	5,401	5,942	5,401	2,971	2,971	2,377	2,285	2,201	2,377
10	23,626	15,751	15,751	8,591	9,450	8,591	4,725	4,725	3,780	3,635	3,500	3,780
8	37,581	25,054	25,054	13,666	15,033	13,666	7,516	7,516	6,013	5,782	5,568	6,013

The NEC mandates that 24 VAC over 100 VA power requires CLASS 1 wiring conduit. Local codes may vary. Do NOT mix CLASS 1 & CLASS 2 circuits in the same conduit. Generally, 24 VAC actuators over 100 VA should be changed to 120 VAC models.

Wire Size vs. Length of Run for SY Series Actuators Modulating




24 VAC		SY1	SY2	SY3	SY4	SY5
current		[A]	[A]	[A]	[A]	[A]
wire gauge		2.8	3.4	3.1	9.4	8.9
MAX distance between actuator and supply [feet]						
18		55	45	50		
16		88	72	79	26	28
14		139	115	126	42	44
12		221	182	200	66	70
10		352	290	318	105	111
8		560	461	506	167	176

120 VAC		SY1	SY2	SY3	SY4	SY5	SY6	SY7	SY8	SY9	SY10	SY11	SY12
current		[A]	[A]	[A]	[A]	[A]	[A]	[A]	[A]	[A]	[A]	[A]	[A]
wire gauge		0.6	0.8	0.7	2.1	1.9	2	2	2.8	2.7	3	4.3	4.5
MAX distance between actuator and supply [feet]													
18		1,287	966	1,103	368	407	386	386	276	286	257	180	172
16		2,042	1,531	1,750	583	645	613	613	438	454	408	285	272
14		3,253	2,440	2,788	929	1,027	976	976	697	723	651	454	434
12		5,167	3,875	4,428	1,476	1,632	1,550	1,550	1,107	1,148	1,033	721	689
10		8,218	6,163	7,044	2,348	2,595	2,465	2,465	1,761	1,826	1,644	1,147	1,096
8		13,072	9,804	11,204	3,735	4,128	3,922	3,922	2,801	2,905	2,614	1,824	1,743

230 VAC		SY1	SY2	SY3	SY4	SY5	SY6	SY7	SY8	SY9	SY10	SY11	SY12
current		[A]	[A]	[A]	[A]	[A]	[A]	[A]	[A]	[A]	[A]	[A]	[A]
wire gauge		0.4	0.4	0.4	1.1	1	1	1.2	1.6	1.1	1.4	2.2	2.5
MAX distance between actuator and supply [feet]													
18		3,701	3,701	3,701	1,346	1,480	1,480	1,234	925	1,346	1,057	673	592
16		5,871	5,871	5,871	2,135	2,348	2,348	1,957	1,468	2,135	1,677	1,067	939
14		9,352	9,352	9,352	3,401	3,741	3,741	3,117	2,338	3,401	2,672	1,700	1,496
12		14,854	14,854	14,854	5,401	5,942	5,942	4,951	3,713	5,401	4,244	2,701	2,377
10		23,626	23,626	23,626	8,591	9,450	9,450	7,875	5,906	8,591	6,750	4,296	3,780
8		37,581	37,581	37,581	13,666	15,033	15,033	12,527	9,395	13,666	10,738	6,833	6,013

The NEC mandates that 24 VAC over 100 VA power requires CLASS 1 wiring conduit. Local codes may vary. Do NOT mix CLASS 1 & CLASS 2 circuits in the same conduit. Generally, 24 VAC actuators over 100 VA should be changed to 120 VAC models.


Actuators: SYx-MFT



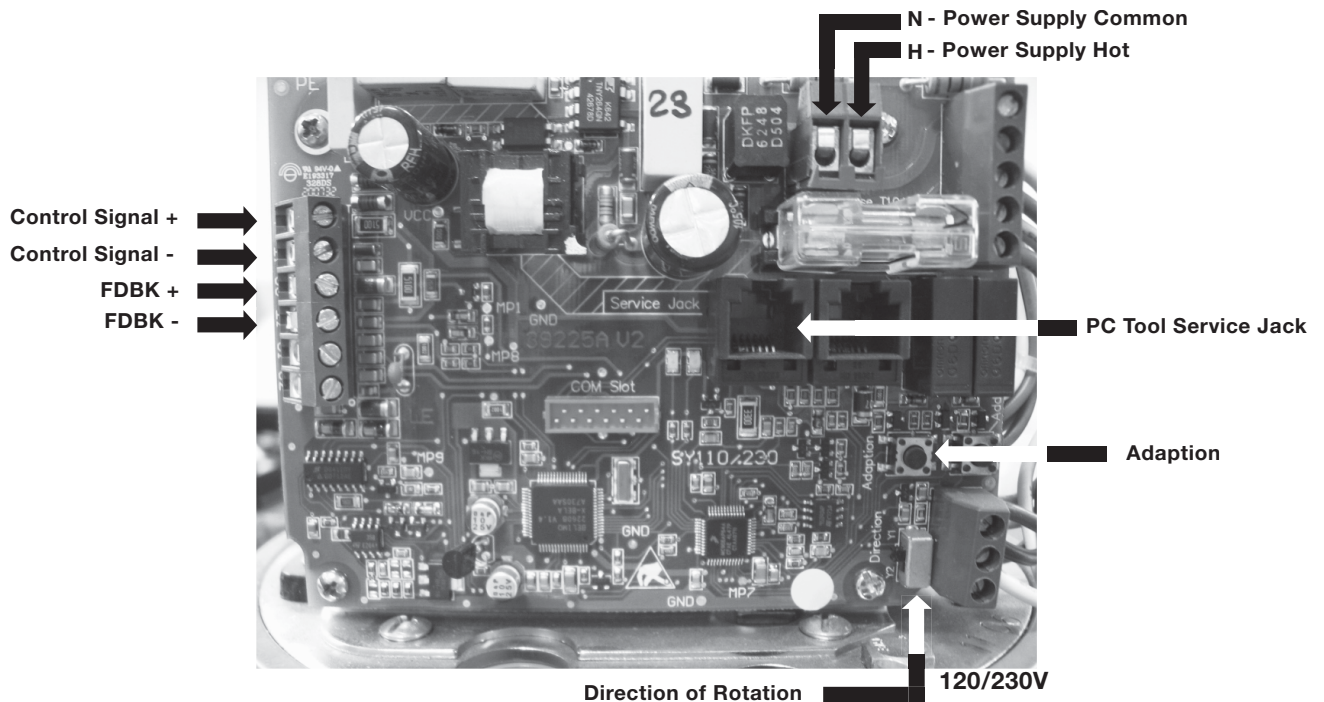
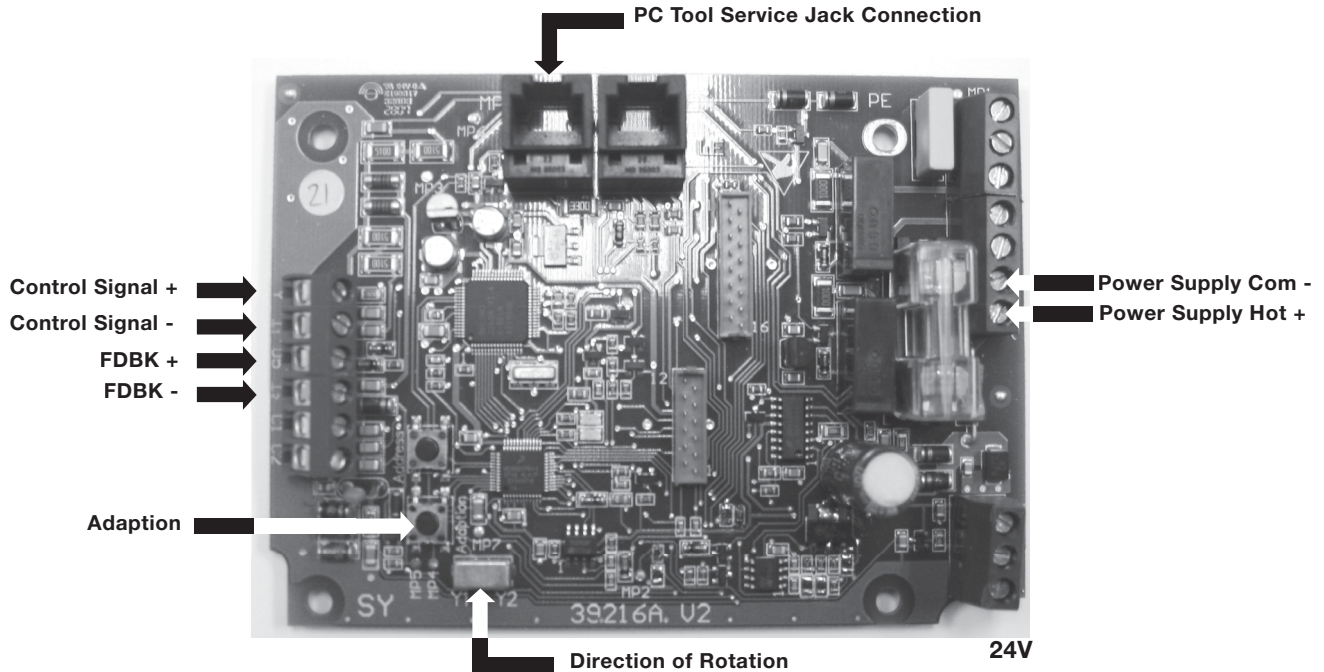
INSTALLATION NOTES

Notes:

1. Motor CAMS have been factory calibrated and should not be moved.
2. An adaption must be performed if any limit switch is adjusted. This will calibrate the beginning and end stopping points. Press the adaption button for 3 seconds and release.
3. New SY actuators must have an adaption performed before operation.



CAUTION

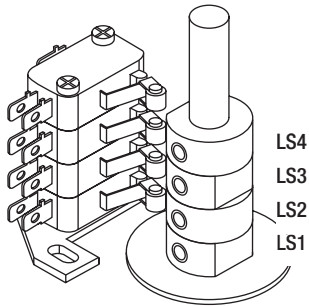


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CAUTION
Electrical Travel Adjustment

SY4-12



Factory pre-set see chart below. Field adjustable if required

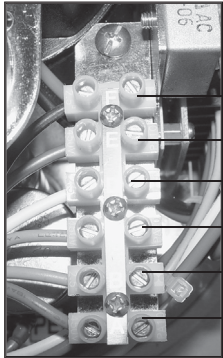
LS4
Auxiliary Switch for Closed Indication

LS3
Auxiliary Switch for Opened Indication

Factory pre-set and calibrated. Do not adjust without consulting factory. This will void the warranty

LS2
"CLOSE"
↻ Clockwise Decrease Closed Angle
↻ Counter-clockwise Increase Closed Angle

LS1
"OPEN"
↻ Clockwise Increase Opening Angle
↻ Counter-clockwise Decrease Opening Angle



Switches at left are shown with actuator fully open.

	0°	3°	87°	90°
LS3	A - B		A - C	
	0°	3°	87°	90°
LS4	D - F		D - E	

Notes:

1. An adaption must be performed when the limit switches are adjusted. For the SYx-MFT actuators. This will calibrate the beginning and end stopping points. Press the adaption button for 3 seconds and release.
2. Contact Technical Support if travel adjustment is required.

INSTALLATION NOTES



Actuators: SY4...12-110 SY4...12-220

Hazard Identification

Warnings and Cautions appear at appropriate sections throughout this manual. Read these carefully.

CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

Indicates an action or condition that may cause irreversible damage to the actuator(s) or associated equipment.

Equipment damage!
Power consumption and input impedance must be observed.

NOTES SY4...5-24

Each actuator should be powered by a single, isolated control transformer.

- Isolation relays must be used in parallel connection of multiple actuators using a common control signal input.
- "H" cannot be connected to terminal #3 and #4 simultaneously.
- **Required:** Terminal #7 needs to be field wired to enable heater circuit.



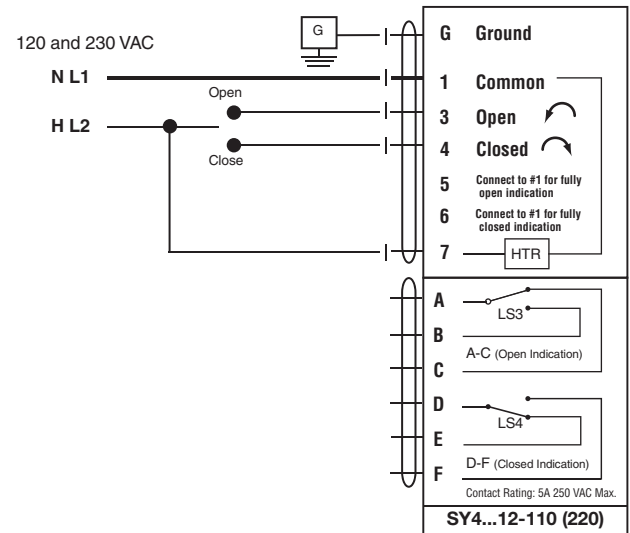
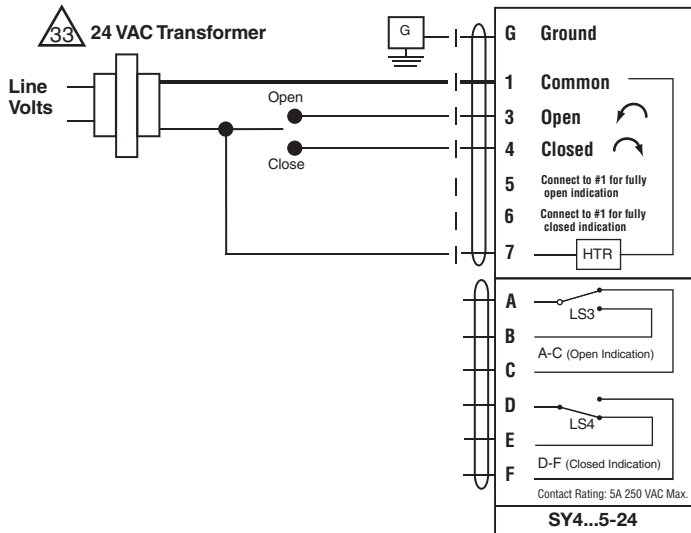
INSTALLATION NOTES

Observe class 1 and class 2 wiring restrictions.

Transformer sizing = SY actuator draw X 1.25 (safety margin)
(Ex. SY2-24 requires 3.0A x 1.25 = 3.75A,
3.75A X 24 VAC = 90VA Transformer).

NOTES SY4...12-110 (220)

- **Caution:** Power Supply Voltage
- Isolation relays must be used in parallel connection of multiple actuators using a common control signal input.
- "H" (L2) cannot be connected to terminal #3 and #4 simultaneously.
- **Required:** Terminal #7 needs to be field wired to enable heater circuit.



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W546

Actuators: SY4...5-24 SY4...12-110 SY4...12-220

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Power consumption and input impedance must be observed.



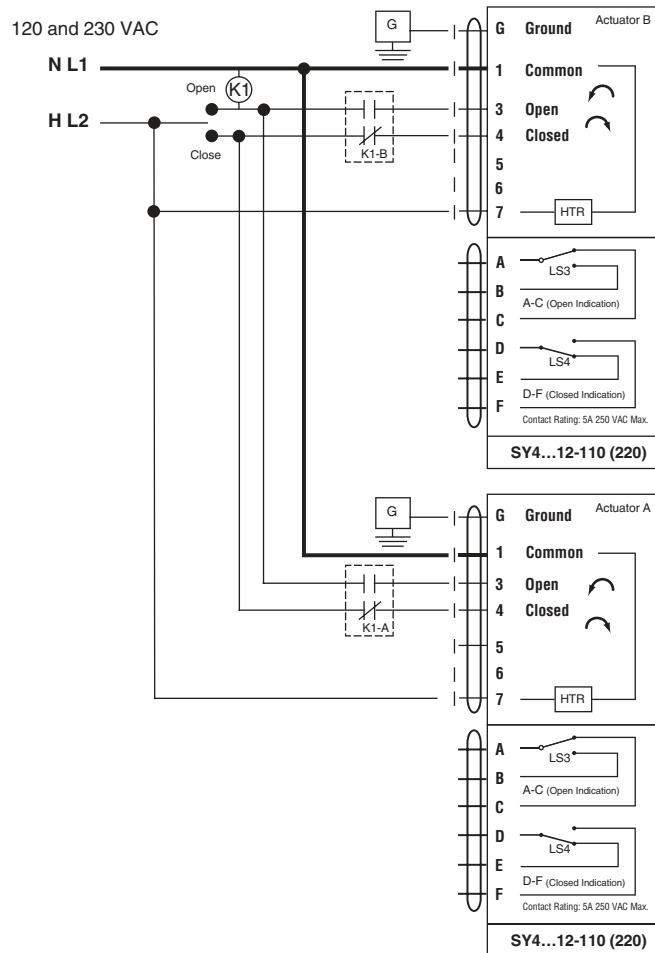
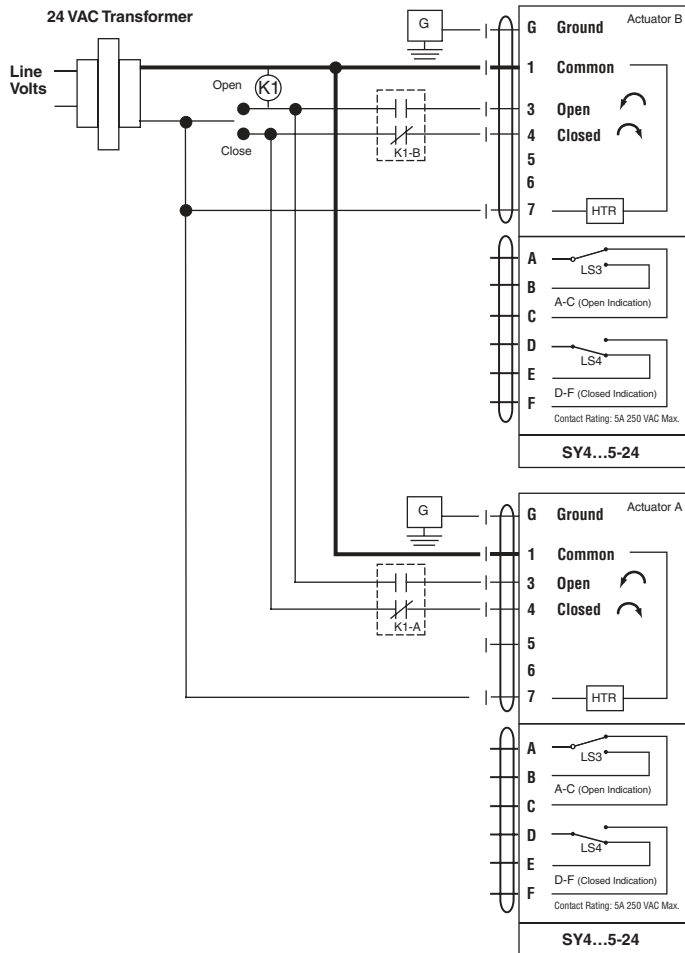
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Transformer sizing = SY actuator draw X 1.25 (safety margin)
(Ex. SY2-24 requires 3.0A x 1.25 = 3.75A,
3.75A X 24 VAC = 90VA Transformer).

NOTES

- **Caution:** Power Supply Voltage.
- Isolation relays must be used in parallel connection of multiple actuators using a common control signal input.
- "H" (L2) cannot be connected to terminal #3 and #4 simultaneously.
- **Required:** Terminal #7 needs to be field wired to enable heater circuit.



Actuators: SY4...5-24MFT SY4...12-120MFT SY4...12-230MFT

Hazard Identification

Warnings and Cautions appear at appropriate sections throughout this manual. Read these carefully.

CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

Indicates an action or condition that may cause irreversible damage to the actuator(s) or associated equipment.

Equipment damage!
Power consumption and input impedance must be observed.

NOTES SY4...5-24MFT

- Each actuator should be powered by a single, isolated control transformer.
- Power supply Com/Neutral and Control Signal "-" wiring to a common is prohibited.

INSTALLATION NOTES

Observe Class 1 and Class 2 wiring restrictions.

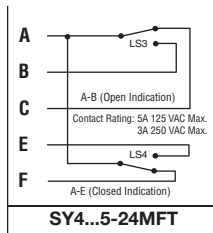
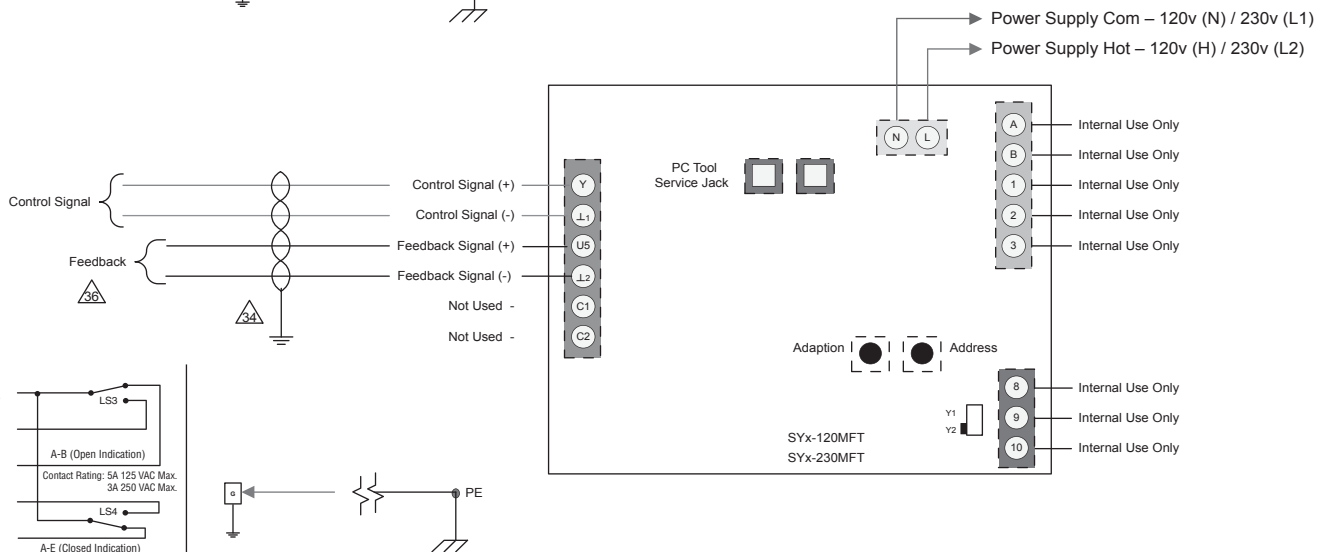
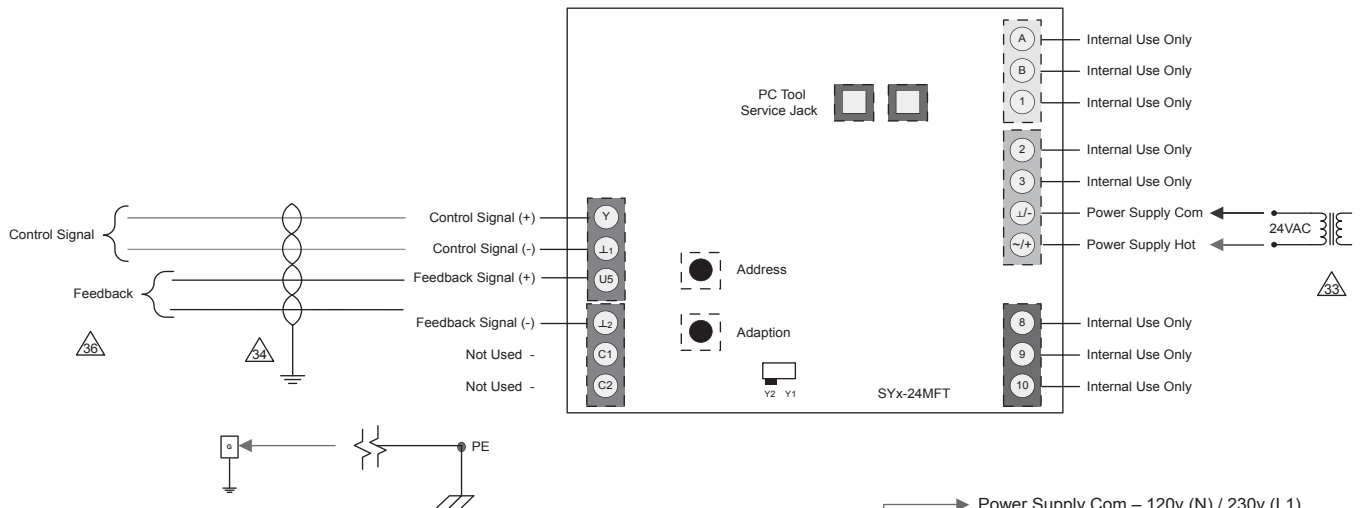
Transformer sizing = SY actuator draw X 1.25 (safety margin)
(Ex. SY2-24 requires 3.0A x 1.25 = 3.75A, 3.75A X 24 VAC = 90VA Transformer)

APPLICATION NOTES

- Ground shielded wire at control panel chassis. Tape back ground at actuator.
- Use of feedback is optional.

NOTES SY4...12-120 (230MFT)

- Caution:** Power supply voltage.



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W547-2

Actuators: SY4...5-24MFT

W650-2

Hazard Identification

Warnings and Cautions appear at appropriate sections throughout this manual. Read these carefully.

CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

Indicates an action or condition that may cause irreversible damage to the actuator(s) or associated equipment.

Equipment damage!
Power consumption and input impedance must be observed.

INSTALLATION NOTES

Observe class 1 and class 2 wiring restrictions.

Transformer sizing = SY actuator draw X 1.25 (safety margin)
(Ex. SY2-24 requires 3.0A x 1.25 = 3.75A,
3.75A X 24 VAC = 90VA Transformer).

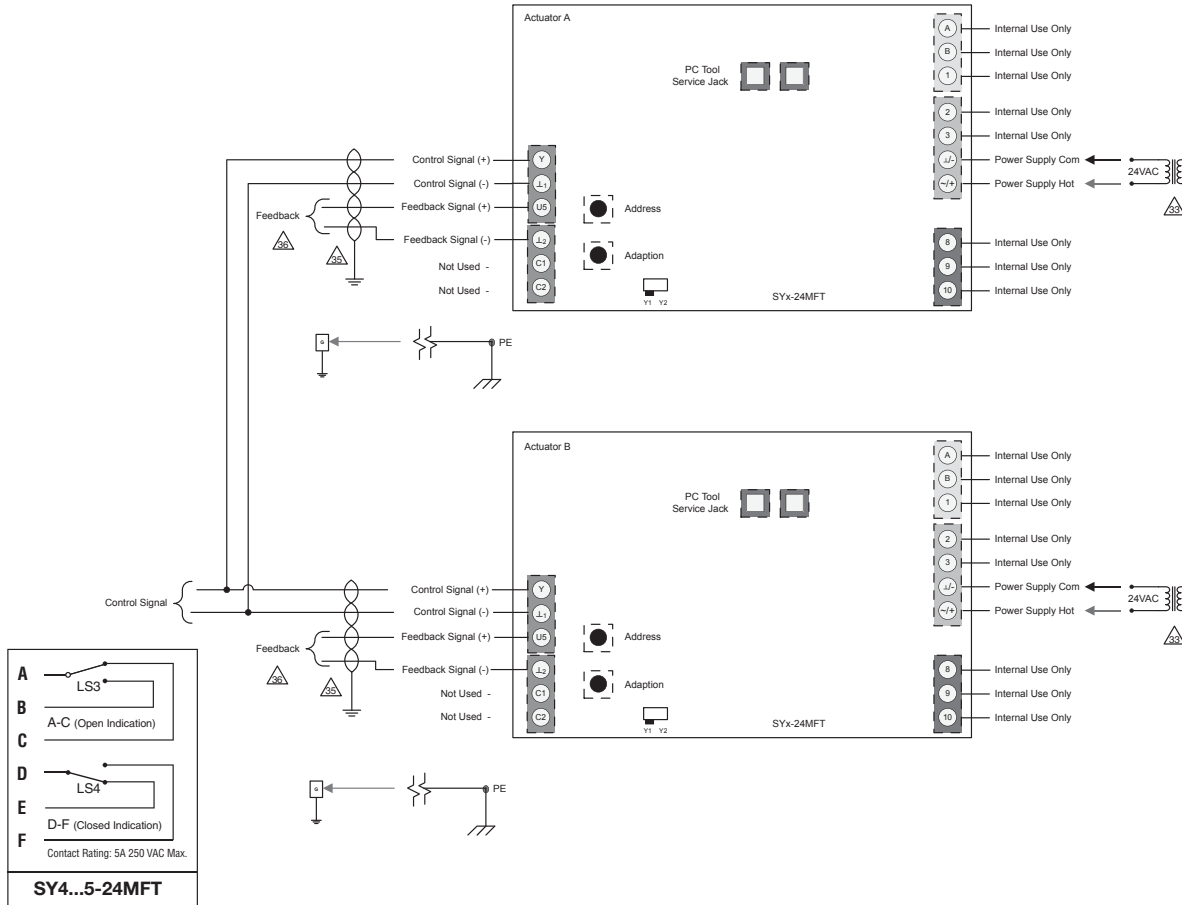
NOTES SY4...5-24MFT

Each actuator should be powered by a single, isolated control transformer.

APPLICATION NOTES

Recommended twisted shielded pair for control wiring.
Ground shielded wire at control panel chassis.
Tape back ground at actuator.

Use of feedback is optional.



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Actuators: SY4...12-120MFT SY4...12-230MFT

W652-2

Hazard Identification

Warnings and Cautions appear at appropriate sections throughout this manual. Read these carefully.

CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

Indicates an action or condition that may cause irreversible damage to the actuator(s) or associated equipment.

Equipment damage!
Power consumption and input impedance must be observed.

INSTALLATION NOTES

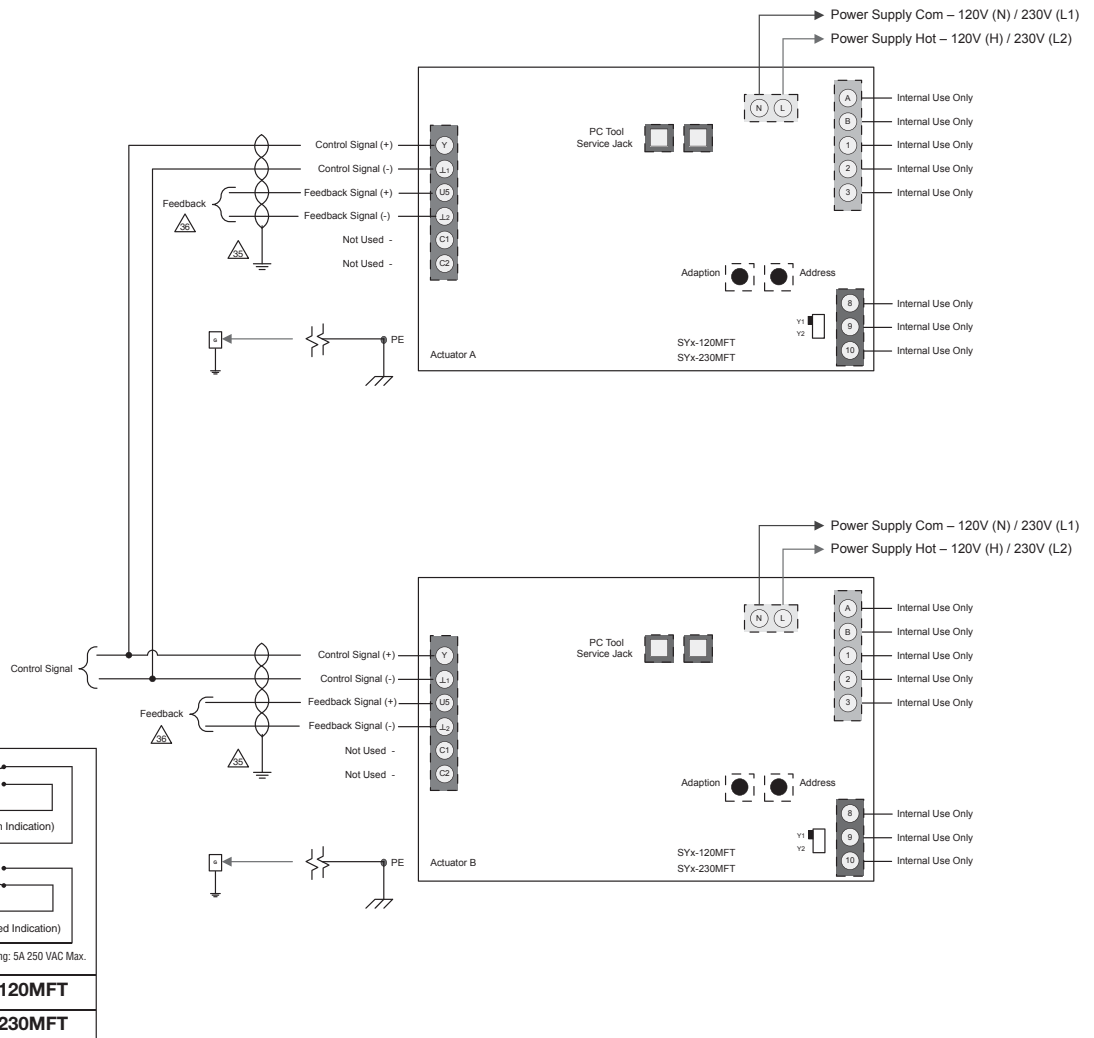
Observe class 1 and class 2 wiring restrictions.

APPLICATION NOTES

- Recommended twisted shielded pair for control wiring. Ground shielded wire at control panel chassis. Tape back ground at actuator.
- Use of feedback is optional.

NOTES SY4...12-120 (230MFT)

- **Caution:** Power supply voltage.



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SY MFT Actuators

Quick Troubleshooting Guide



Verify that Control Signal and Power are present at the actuator.

- Measure between Control Signal + and – and power + and – on control board. (See photo of control boards below for locations).
- Check fuses on both boards. If fuses are blown, replace before proceeding.

Verify that the green LED is lit on the control board – this indicates power is present.

If yes:

- Push the button labelled “Adaption”, hold for 3-5 seconds then release. (see left photo for 24V, right photo for 120V)
- The LED next to green LED should light up (amber in color)
- Actuator should click. Drive fully in one direction. It will stop there for 5-10 seconds. Click and drive fully in the opposite direction.
- The amber light should go out.

If the sequence does not happen as above, please have the tech make a note of what does happen.

Possibilities include

- Amber light goes on, actuator clicks but does not move at all.
- Amber light goes on, actuator clicks and drives in one direction, and clicks but does not drive in the other direction.
- Amber light does not light, and the actuator does nothing at all.

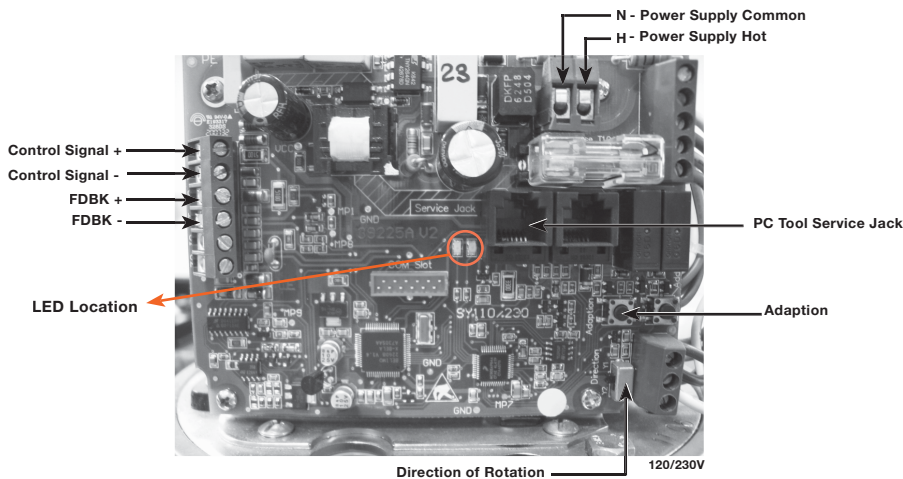
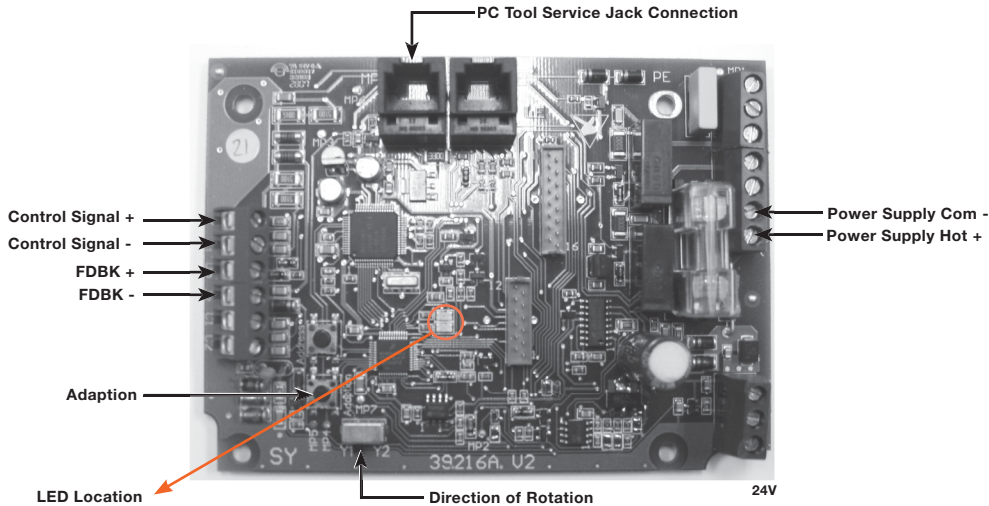
If something else occurs, please make a note and communicate to a Belimo Technical Support Representative as the actuator most likely will need to be replaced.

If the actuator adapts correctly:

1. Verify correct wiring of control signal (confirm correct polarity of field wiring and meter). Must have “Control +” and “Control –” and not share the “Control –” with the 24V common, or 120V Neutral (4 wires are required, 2 for power and 2 for Control Signal).
2. Provide a DC control signal other than minimum or maximum (suggest 6 VDC or 50% command).
3. Measure with DC voltmeter on “Control +” and “Control –” at actuator and verify that a voltage other than 0(2) or 10V is present on those terminals. If actuator does not drive to approximately the mid position and voltage is present, the actuator most likely will need to be replaced.

The following information is helpful to determine warranty coverage and additional steps that might need to be taken:

1. PO# or Belimo SO# or ID# (ID is located on actuator cover under the model #).
2. Is this a retrofit or was it factory assembled to a valve?
3. Has this actuator ever worked on this site (brand new install that did not work, or has been working correctly for a certain period of time).
4. Proper transformer sizing (see PGPL for current VA requirements).
5. Confirm correct wire size vs. length or run for SY actuators.



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